

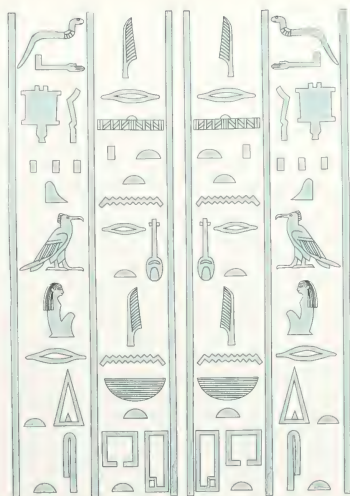
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THE SYMBOL OF THE NOME.
FROM THE SOUTH WALL OF TOMB NO. 3.

M. W. Birchden, 1891.

ARCHAEOLOGICAL SURVEY OF EGYPT

EDITED BY F. LL. GRIFFITH, M.A., F.S.A.

FIFTH MEMOIR

BENI HASAN

PART III.

BY

F. LL. GRIFFITH

WITH TEN COLOURED PLATES

SPECIAL PUBLICATION OF THE EGYPT EXPLORATION FUND

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B E N I H A S A N .

PART III.

I N T R O D U C T I O N .

IN this third volume on the tombs of Beni Hasan is commenced the publication in facsimile of certain important details from the scenes and inscriptions, which are shown in outline only, and on a greatly reduced scale, in *Beni Hasan*, I. and II. The wall-pictures in tombs of the Middle Kingdom are usually so roughly executed that but little more is to be learnt from large-scale drawings than from reductions to one-twentieth, such as form the bulk of our first publication. But there are exceptional cases, in which great care and attention to minute details of depiction were expended by the artist on a particular portion of a tomb otherwise roughly executed, or in which the artistic workmanship over one whole monument rose far above the level of the art displayed on those around it. Beni Hasan affords an example of the first class of exception in the great south wall of the tomb of Amen. On this almost every line is sharply defined, while in other parts of the tomb ill-drawn figures carelessly smeared with a few colours serve indeed a decorative purpose when seen at a proper height and from a proper distance, but will not bear close examination. Again, the whole of the paintings in Tomb 3

(that of Khnemhetep) are neatly drawn with a considerable amount of detail, and in places their execution rises almost to the highest level of Egyptian art.

For our present purpose, however, the south wall of the tomb of Amen affords by far the best material. For the study of detail it is an almost ideal example, the scale of the designs being very large, while the workmanship is minute. It is, moreover, in a very fair state of preservation. The same cannot be said of Tomb 3, in which the colours and even the designs are obscured by dirt; the oil applied to the walls by previous copyists to bring out the faded colours has remained on the surface and caused the dust to adhere in a thin coating, which cannot be cleaned off without further injury to the paintings.

In studying Egyptian wall-painting the question immediately arises how far the faithfulness and realism of the artists is to be depended upon. Their bad work was often very bad; but their best work also was done principally with a view to decorative effect, and thus we see, for example, that the fins of the fishes are often misplaced, the colours of a bird may be taken from one species and

the form from another, while everything is considerably conventionalized. And although the colouring often forms a valuable guide as to the material of objects represented, yet in some cases it is varied only to distinguish different parts of a sign or to break up too uniform a surface.

The Egyptian artist must often have worked in comparative darkness, or with weak artificial light, and it is marvellous that he could obtain such results as he did. The copyist of to-day labours under the same disadvantage, with other disadvantages superadded. The designs are obscured by injuries of every description in the way of effacement and stains. It would also seem that some of the mineral colours have changed to a certain extent: and if any vegetable colours were used they have disappeared entirely. These considerations may perhaps explain how it is that the colouring scheme often appears so primitive and unnatural. Under the circumstances it is not surprising if modern copyists obtain different results from the same subject. Mr. Blackden aimed at ascertaining the original design in a somewhat diagrammatic style: Mr. Carter and Mr. Brown copy faithfully what they see, and render it in its present condition.

The subjects illustrated in the selections for this volume divide themselves into two classes. Those in the first class bear upon the history of Egyptian writing, being selected examples of the pictures which composed the hieroglyphic system. The second class consists of details from the scenes illustrative of the state of culture in the valley of the Nile at the time these tombs were made. The scenes have afforded material to a succession of students,

who have examined them with more or less care, but the archaeological accuracy which considers variation of form and material in the objects and implements depicted has not entered largely into their work. The volumes of Wilkinson, Rosellini, Champollion, Prisse, and Lepsius—to name only the older workers—are valuable for suggestions in these matters, but can rarely be fully relied upon in the details. One of the most profitable lines of research to be pursued in Egyptology must be based on the making and collecting of full-sized facsimile drawings of the representations of weapons, utensils, ornaments, &c., depicted on the finest monuments of different periods in Egyptian history.

With regard to the writing, it is natural that the details of the picture-signs should have been slurred by students as much as those of the scenes. The pictorial nature of the signs has been treated by Champollion, Birch, and others, and the forms of a very large number are now well understood; yet careful facsimiles of good examples of even the commonest and most obvious are valuable as conclusive evidence of their meaning as pictures. The tombs of Beni Hasan belong to a good period. It was not until the XXth Dynasty that conventionality reigned supreme: until that time the artist drew, whether roughly or carefully, from his knowledge of objects around him, and infused something of contemporary life into his picture-signs as well as into his scenes. He is often unintelligible to us, but the study of these ten plates has thrown light on many abstruse points, and continued examination should eventually provide a key to all the puzzles.

I. HIEROGLYPHS.

PLATES I.—VI.

THE first six plates contain a selection of hieroglyphic signs copied by Mr. Blackden in 1891 and by Mr. Carter in 1895; of these the greater number are from the finely painted south wall of the tomb of Amen^y.¹ Figs. 2, 23, and 32 are from other parts of the same tomb; Figs. 6, 10, 14, 30, 35, 52, 60, 68, 87, 91, 96 are from the tomb of Khnemhetep, Tomb 3, and Fig. 80 is from Tomb 17. Four of the signs, Figs. 82-84 and 90, were copied by Mr. Percy E. Newberry in Tomb 14.²

It is perhaps well to remind the general reader that in the hieroglyphic inscriptions the signs may have either a phonetic value expressing sound, or an ideographic value expressing meaning. Very often a group of phonetic hieroglyphs is followed by an ideograph which defines more or less the meaning of that group; in that case the ideographic sign is called the determinative.

A large number of the hieroglyphs shown in Pls. i.-vi. are taken from the great list of offerings given on Pl. xvii. of *Beni Hasan*, I.

In each of the three rows of inscription composing this list the name of the offering is written out at the top of the column, and a picture of the object offered is placed at the foot as a determinative. But these pictures are more precise than determinatives are wont to be in ordinary writing, and while many of them are regular hieroglyphs, they must not be considered as being all necessarily such; some, however, of the more exceptional, viz. Figs. 21, 27-29, 38-40, 45, are admitted into the plates on account of their interest. We have called them "picture-determinatives."

There is also another class of hieroglyphic signs, rare, and unnoticed in the grammars. These may be termed "punning hieroglyphs": they have peculiar forms and values, and were apparently invented in a playful moment by the artist and scribe, who would write brief and well-known formulae in them as a riddle for the amusement of visitors. Good examples of this class are found in *Beni Hasan*, II., Pls. xiv. and xvi., and one of them is shown in the present volume on Pl. v. (Fig. 80). It is hardly justifiable to include in this category the rare signs Figs. 82-84 and 90, since the

¹ See *Beni Hasan*, I., Pls. xvii.-xviii.

² Tomb 17 is published in *Beni Hasan*, II., the other tombs mentioned in *Beni Hasan*, I.

inscription in which they occur is otherwise ordinary, and although we are as yet quite unable to read them, they were probably signs in regular use.

The most valuable contribution hitherto

made to the study of detailed hieroglyphs is contained in Flinders Petrie's *Medum*, which gives many careful facsimiles from very ancient inscriptions,¹ dating from the time of the IVth Dynasty.

PLATE I.

, read  (?) *mahez*, the symbol of the XVIth nome of Upper Egypt. From the east end of the south wall of Tomb 2; *B. II.*,² I., Pl. xvii., second line of inscription in large characters over principal figure. Actual size. M.W.B., 1891.

The sign is composite, consisting of (1) the badge proper, namely, the figure of an oryx standing before a bundle of fresh-cut food ; (2) the stand, , on which the emblem was carried; (3) the sign of territory, , or more particularly of a nome.

(1) The animal, , read *mahez*, is slightly conventionalized, and it is impossible to say whether the figure represents *Oryx beisa* or *Oryx leucoryx*. It is of the male sex. The horns are very slightly curved; horns, hoofs, fetlocks and the tip of the tail are black, the rest of the body is white with buff under neck,

chest, and belly; the eye is defaced and indistinct. The bundle of food, , named  *kheresh*, consists probably of some kind of tall grass: the top of the bundle is coloured white to represent flowers, the stems are green. The bundle is tied together with a string or band, coloured white and fastened in a knot suggestive of the sign , which is indeed probably derived from some such tie.

(2) The stand, , read  *âat*, is of the kind which was used to support all divine symbols. It consists of a horizontal bar placed on an upright, which meets it at a considerable distance to one side of the centre, another bar being fixed obliquely as a strut between the upright and the longer end of the horizontal portion. Pendant from the top of the upright at the other side of it are two long white plumes with rounded black tips, and crossed by curved black bands at intervals. At the extreme end of the horizontal bar, on the same side as the strut, is an object shaped , and secured in place by a broad peg passed through the bar. The whole of the stand, with the exception of the plumes, is coloured red, as

¹ See especially the Frontispiece, Pls. i.-xxviii., and the fourth chapter of the work.

² In the descriptions the initials *B. II.* refer to the two previous memoirs on *Beni Hasan*; M.W.B., II.C., P.E.N., indicate that the copies were made by Mr. Blackden, Mr. Carter, and Mr. Newberry, respectively.

being of wood. The Δ is usual on all such stands, but its significance is not very clear. It seems to be identical with the sign Δ , the alphabetic character for *q*. The form suggests the slope of a hill, part of the "mountain" signs  or .¹ But while  and  are coloured as pebbly desert, pink speckled, Δ is green (in Tomb No. 3, *B. II.*, I., Pl. xxviii., where  and Δ can be compared). The green colour probably indicates vegetation: and as the word Δ  $\overset{\Delta}{x}$ *qat*, from *qa*, "high," means the *higher* cultivable land of the Nile valley, we may suppose that Δ was originally the symbol for that kind of land, and hence obtained its value *q*: in the same way as the hand,  (Fig. 53), obtained the value *d* from  *det*, and  the value *h* from  $\overset{\Delta}{1}$, in each case the radical only being retained and the feminine ending ignored. Having now obtained the general significance of the sign Δ , we may perhaps be able to discern its meaning in connection with the nome-standard. The  beneath the  signifies cultivable land, and although the oases were from early times connected with certain nomes, there is

nothing to show that strictly speaking the nomes themselves ever extended into the desert. The probability is, therefore, that, as the Δ is placed at the outer end of the standard, it symbolizes the slope from the valley to the desert, which formed the boundary of the nome.

(3) The symbol of territory, , read  $\overset{\Delta}{\square}$ *spt*, appears as a black openwork frame forming two rows of rectangles, four to each row. The black colour not improbably indicates the black alluvial soil of the Nile valley, and  is evidently a plan of subdivided land, or a figure of subdivision in general by means of straight lines. The principal field-measure, the *arura*, was mathematically a square of 100 cubits, but its hieroglyphic picture was an oblong rectangle, ; therefore it seems likely that the symbol is a plan of land duly measured, or perhaps divided up by dykes for purposes of irrigation.

The Egyptian name of the oryx, without distinction of species, is *mahez*, and this appears to be the reading of the entire sign, : the name of the nome is of the masculine  gender.

PLATE II.

Fig. 1. Flying duck, ; read  *pa*. From east end of south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., top row of

great list of offerings, sixth column from left. About one-half actual size.² M.W.B., 1891.

The bird has its legs bent as if it had just

¹ The picture of a slope or hill assumes the form of Δ in Lanzone, *Papyrus du Lac Moeris*, pl. i.

² The hieroglyphs on Pls. ii.-vi. are all reduced to about one-half size, with slight variations of scale in the different plates.

risen from the water or was about to settle. The figure is very hybrid and conventional, the tail alone being actually distinctive; the rest of the details are indeterminate. The tail is that of the pintail duck, *Dafila acuta*, a dull-coloured species which is common in Egypt.

The verb *pa*, the full form of which is perhaps *pay*, in Egyptian means "to fly," ; hence this hieroglyph obtains its phonetic value as the common syllabic for *pa*.

Compare Fig. 8.

Fig. 2. Plover (species?), bustard (?), . From south-west wall in shrine of Tomb 2; *B. II.*, I., Pl. xx., lowest row, group . H.C., 1895.

The drawing in the shrine is by no means equal to that on the south wall of the main chamber. The original outline of the bird was in red, and has been corrected by the artist in colouring the figure, the first line being clearly visible above the back. The length of the legs seems to indicate some species of plover.

This is a rare sign, and the reading of it is uncertain. The group in which it occurs evidently designated the office of one of the chief functionaries on the estate of Amenemhat, the bearer of the title being followed by the steward of the "white house," or store. The sign is perhaps identical with that read *ub* by W. MAX MÜLLER,¹ but the group in which it occurs recalls the title   *rekhti*, "fuller."

Fig. 3. Plover (species?), ; read  *ba*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., lowest

row of great list of offerings, seventh column from right. H.C., 1895.

This sign usually shows a coloured feather or tuft projecting from the front of the bird's neck just below the head, as here, or from the breast.

The sign represents the common syllabic *ba*. The root *ba* has the meaning of a soul in bird form; it was therefore probably at one time the name of an actual bird.

Compare Fig. 10, and PETRIE, *Medum*, Pl. xiii., lower left-hand corner, group    (without tuft).

Fig. 4. Crested ibis (species?), ; read   *akh*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., inscription in second row from top depicting human figures, group    . M.W.B., 1891.

The bird is highly conventionalized.

The sign is used to spell the root *akh*, which occurs with the meanings: (1) "brilliant," also "excellent," "useful"; (2) the glorified spirit of man after death. As in the case of the *ba* (Fig. 3), this spirit also was perhaps considered to exist in a bird form.

Fig. 5. Name of the goddess Hathor, ; read    *Het-Her*. From west end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xviii., second line of inscription in large characters over the lady Hetept. M.W.B., 1891.

The sign is composite, consisting of  *Het*, and  *Her*.  is clearly the plan of some structure. The word *het*, which it represents, appears to have been used especially of a place

¹ *Recueil de Travaux*, ix., 163.

where there were a number of buildings within one enclosure wall, as in the case of temples and fortresses, and the sign seems to represent the enclosure in plan. The structure indicated at the corner is curious; apparently it marks a strongly fortified entrance.¹

, the symbol of Horus, is probably the sparrow-hawk. The bird in PETRIE, *Medium*, frontispiece, figs. 1, 3, is almost certainly the eagle, *tiu* (compare Fig. 13, below).

Het-Her, "house of Horus," appears to have been the name of the goddess as nurse or mother of the infant god.

Fig. 6. A goose (species?), ; read   *Geb* (?). From extreme east end of south wall of Tomb 3; *B. H.*, I., Pl. xxxv., third line of the large inscription over Khnemhetep. H.C., 1895.

This bird, if really distinct from  *sa*, is perhaps to be found only in the name of the god Geb,  .

Fig. 7. An owl, ; read *m*. From one of the large inscriptions on south wall of main chamber in Tomb 2; *B. H.*, I., Pls. xvii. and xviii. M.W.B., 1891.

The species represented is evidently the barn owl, *Strix flammea*.

The sign is used as an alphabetic character for *m*, and it is not known to occur in any other sense in ordinary hieroglyphics.

Compare PETRIE, *Medium*, frontispiece, fig. 2.

Fig. 8. Flying duck, ; read *pa*. From east end of south wall in main chamber of

Tomb 2; *B. H.*, I., Pl. xvii., middle row of great list of offerings, seventh column from left. M.W.B., 1891.

Compare Fig. 1, the description of which applies also to this.

Fig. 9. Swallow (?), ; read  *ur*. From south wall in main chamber of Tomb 2; *B. H.*, I., Pl. xvii., middle of lowest row, group . M.W.B., 1891.

The bird is perhaps intended to represent one of the wagtails; the shield-shaped dark patch on the breast is especially characteristic of some members of that tribe. In hieroglyphics the *ur* bird always has the tail more or less forked, in contrast to the *sher* bird, which signifies smallness, worthlessness, that which is evil. The only known meaning of *ur* is "great," and it is difficult to connect this idea with the form of the sign .

Compare Fig. 14, and PETRIE, *Medium*, frontispiece, fig. 4.

Fig. 10. Plover (species?), ; read *ba*. From centre of east wall in main chamber of Tomb 3; *B. H.*, I., Pl. xxxiii., top line, group  . H.C., 1895.

Compare Fig. 3, the description of which applies to this also.

Fig. 11. Fat duck, ; read  *ush* (?),   *aydu* (?). From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xvii., inscription above procession of *kher-heb* priests in third row from top, group . H.C., 1895.

This bird is perhaps a garganey teal, *Querquedula circia*. But the species is immaterial;

the full crop, indicating good feeding, is the important distinction.

If the sign reads *apdu*, it means merely "water-fowl"; but in Tomb 3 (*B. II.*, I., Pl. xxvii.), where it is rather more plainly coloured, it stands for the verb , and means "fatten by artificial feeding." Hence the reading of  may possibly be *ushu*, and it may mean "fat water-fowl."

Fig. 12. A goose, , read $\rightarrow$ , *sa*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., in tenth column from left of lowest row in great list of offerings; group . H.C., 1895.

This bird is different from that which is usually depicted in the same tomb to represent the same value, *sa*, in , "son": it rather resembles the *Geb*-bird.

Compare Fig. 6, and PETRIE, *Medum*, Pl. xii., where the bird is *sa*, "son."

Fig. 13. Egyptian vulture, *Neophron percnopterus*, , read *a*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., great list of offerings. M.W.B., 1891.

The colouring is indeterminate, but the naked flesh round the base of the bill is a great help to the identification.

The sign is used as an alphabetic character with the value *a*; sometimes the syllabic for *tiu* has nearly the same form, but in later times the latter is often clearly distinguished by a tassel on the breast.

Compare PETRIE, *Medum*, Pl. xiv., group . The sign in the frontispiece, figs. 1 and 3, is quite different: this can hardly be

the hawk of Horus, it must be the eagle *tiu*, and shows that there is a radical distinction between the sign for *a* and the sign for *tiu*, the two values being represented by two species of bird as early as the IVth Dynasty.

Fig. 14. A swallow (?), , read *ur*. From south end of east wall in main chamber of Tomb 3; *B. II.*, I., Pl. xxxiv., top line. H.C., 1895.

The bird is very hybrid, but the characteristics of the *ur* sign are sufficiently observed.

Compare Fig. 9 for a description of a similar sign.

Fig. 15. Chick, , read *u*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pls. xvii., xviii., great list of offerings. M.W.B., 1891.

This sign clearly represents the young of a partridge or quail: the domestic fowl was of course unknown in ancient Egypt. As a picture, and not as representing phonetic value, the same or an almost identical figure is depicted in tombs of the Old Kingdom, apparently as the representative of the full-grown quail. In the tomb of Ptahhetep, as given in DÜMICHEN, *Resultate*, Pl. ix., bottom row, we evidently have the figures of the *zat*, or crane, the *set*-duck (sheldrake?), the *ser*-duck (teal?), the *menut*, turtle-dove, and the *párt*, or quail, in proper sequence, as they are given in a list contained in the Rhind Mathematical Papyrus (see *Proc. Soc. Bib. Arch.*, xvi., 244).

 as a hieroglyph is known only as the alphabetic character for *u*.

Compare PETRIE, *Medum*, Pl. xi., and *passim*.

PLATE III.

Fig. 16. Clump of papyrus, ; read  *ha*, and  *meht*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., in eleventh column of top row in great list of offerings, group  . M.W.B., 1891.

The sign consists of the representation of a group of three flowering stems of papyrus, *Cyperus papyrus*, highly conventionalized as usual in Egyptian art, springing from a scaly sheath standing upon, i.e. in, blue-coloured water or ground.

The papyrus being selected as the plant characteristic of Lower Egypt, this sign is read *meht*, "north."  is the ordinary syllabic for  *ha*, but the origin of this value is uncertain. In the absence of a better explanation, we may perhaps suggest the following. The principal meaning of *ha* is "behind," often with the sense of protection at the back of a person, as it were a shelter.¹ In the paintings the papyrus clump constantly forms the screen used by fowlers when lying in wait for game, or shades the fisherman from the rays of the sun while he splits fish for drying. In the level land and marshes of the Delta the papyrus would naturally afford the most obvious and available shelter. Although  has in the present instance the value of *meht*, more usually it stands for the syllable *ha*; while  (with lateral stems bent down) is

used for   *adh*, the "papyrus marshes" of the north of Egypt, and  *meht*, "the North."

Of late years several leading Egyptologists and others,² not making sufficient allowance for the conventionality of Egyptian drawing and overlooking many clear proofs of the real nature of the plant indicated by , have refused to recognize the papyrus in it, and, seizing upon some of the hybrid characteristics introduced by the ancient artists, have endeavoured to prove that it was meant for some species of lotus, or other flowering plant without affinity to any sort of reed. As the single stem, , forms an important element in Egyptian decorative art, architectural and other, it is worth while to point out that however inadequately the signs  and  may represent papyrus plants, stems, and umbels, it is certain that the Egyptians intended them to do so.

If we look at Egyptian representations of marsh scenes we see the  introduced almost universally, often in groups, pretty much as in the hieroglyph  or : tall, and screening the fowler from the view of his intended victims, or the fisherman from the rays of the sun. In other cases we may see birds and animals perched on the tops of the plants, or climbing up the stems; or again we have scenes in which the stems are gathered in

¹ Compare especially the word    *ha*, "screen," "defence."

² GOODYEAR, *Grammar of the Lotus*, *passim*; LEFÉBURE, in *Syllaire*, I., p. 1, *et seq.*; to a certain degree also PETRIE, *Egyptian Decorative Art*, pp. 61, 75.

large bundles, and canoes are built of them. It is hardly necessary to refer to any particular scenes for such representations; they are to be found in every collection of drawings from the tombs. Good examples may, however, be seen in PETRIE, *Medum*, Pls. xii. and xxii.; *Beni Hasan*, I., Pls. xxxii. and xxxiv.; *El Bersheh*, II., Pl. xvi.; *Paheri*, Pl. iv.; *L. D.*, ii., 12.

A priori, there would be a very strong presumption that this tall marsh-plant, with its simple stems, could be nothing but the great reed which was one of the most valuable and conspicuous products of the whole land. Its luxuriant growth in the marshes, its height, and the use to which it was put for building canoes, are all in favour of this view. And as if to remove all doubt from our minds, we find in the decree of Canopus that the  sceptre held by goddesses is designated in the Greek version σκηπτρον παπυροειδες, "papyrus-like sceptre."

The critical reader, however, although he may assent cordially to the *a priori* probability of the identification, will find a very great difficulty in the form of the head of the . The inflorescence of the papyrus is a somewhat globular umbel, consisting of thin filaments starting from the top of the tall stem, angling over evenly on all sides; also, the bracts at the base of the umbel are far larger than those that are generally shown in the . These objections are certainly of considerable weight, especially as the form of the head is constant in all the representations, and the peculiar bracts are rarely absent.

Yet it is not necessary to go far in search of

an explanation.¹ The papyrus head has three main forms, or stages. When mature it is as above described, with minute flowers upon the filaments. When quite young the umbel is a straight tuft enclosed in a sheath of long bracts. Gradually the head widens until at one stage it assumes a form very closely resembling the head of the , the filaments being still stiff and straight, and the bracts nearly as long as the filaments. Thereafter the filaments grow longer and longer, and begin to droop over until at length the mature form is reached.

From want of training in perspective, Egyptian artists were quite incapable of representing the complicated lines of the mature inflorescence: they were always compelled to seek solidity of form for the sake of outline. Fortunately for them the papyrus umbel in the earliest stage of its development offered this quality, and in Egyptian drawings the young bud  is common, interspersed with the . But the second stage afforded the best general type within their scope, although when growing this particular form is lost among the crowd of maturer umbels. It should also be noted that the filaments are visible in all large-scale representations of the . Moreover, the immature stem of the papyrus was particularly appropriate to the notion of "green, flourishing, vigorous," symbolized by , and this again may have helped the artist to be satisfied with his selection of the type.

¹ From a report in the *Revue Archéologique* it appears that Joret has already given a similar explanation to the one here given, in a paper read before the French Académie des Inscriptions (sitting of October 30th, 1895).

It would seem as though the finest artists of the Middle Kingdom, knowing their own limitations, had avoided representing the papyrus in the scenes. The artist who decorated the tomb of Tehutihetep at El Bersheh rejoiced in depicting the lotus exquisitely by line and tint,¹ but shrank from attacking the perspective of a papyrus head in full flower. He was obviously dissatisfied with the stiff convention which he had been taught to recognize as the equivalent of the "paper-reed," but he knew not how to draw except in diagram, and wisely left alone what clearly lay beyond his skill.²

Such is the explanation of the general form of  and . Two minor details, the shortness of the bracts and the brownish colour generally given to the upper edge of the umbel are doubtless matters of convention. As to the first, other flowers usually have short bracts or calices, and Egyptian drawings are often hybrid in detail. As to the second, the tips of the filaments or peduncles of the papyrus turn down as the flower matures, and are quickly affected by cold, and on this account a brown edging may have been regarded as a characteristic of the plant. If the papyrus had become extinct, how utterly all attempts to realize its appearance from the Egyptian drawings would have failed!

Lastly, if the head were really imitated from some species of lotus, why do we not find this lotus pictured low-growing on the surface of

the water, as the blue and the white lotus often are. The filaments and the brown edging of the  can have no analogies in the lotus flower.

Compare , in PETRIE, *Medum*, Pl. xxi.

Fig. 17. ; read  *nen*. From east end of south wall in main chamber of Tomb 2; B. II, I., Pl. xvii., eighteenth column from right in middle row of great list of offerings. M.W.B., 1891.

This is evidently a figure originally drawn from plant life, but what plant it was intended to represent it is difficult to say; the Egyptians were certainly not adept at representing any plant but the lotus. The single sign here duplicated shows a stem, which together with its two lateral branches is tipped with red, and may have been intended for the tender succulent sprout of some herb that springs up from the earth tipped with pink or brownish-red; we find in fact a plant-name,    *nen*, which must be the origin of the value *nn* for . This is believed to be the radish, *Raphanus sativus*, specimens of which have been identified amongst the XIIth Dynasty remains at Kahun.³

The single form  is read  , one meaning of which is given by BRUGSCH as "flower of the lotus"; but ERMANN attributes it the meaning of "a bud."

Fig. 18. Writing outfit, ; read  *nââ*, and  *snââ*,  *sesh*, &c. From east

¹ *El Bersheh*, I., Frontispiece and Pl. xxi.

² He omits the papyrus entirely from its accustomed place in the fowling and fishing scenes of the inner chamber. It seems, however, to have been shown in the scenes of the outer chamber, *El Bersheh*, I., p. 14 and Pl. viii.

³ LORET, *La Flore Pharaonique*, Second Edition, p. 108. NEWBERRY in PETRIE's *Kahun*, p. 50.

end of south wall in main chamber of Tomb 2; *B. H.*, I., Pl. xvii., towards left of lowest register, group   . M.W.B., 1891.

The outfit consists of—(1) A palette, coloured black and having two circular hollows, the one cup being intended for black and the other for red ink. The line painted across each probably represents a groove for securing the cake of ink in place. (2) A little globular water-pot, no doubt carefully stoppered. (3) A long, narrow piece of wood, flat, partly covered in the middle with a band or wrapping of leather (?), and channelled to hold a set of reed pens, which it would protect from injury. These three articles are held together by cords in such fashion as to facilitate their being slung over the left shoulder of the scribe, the palette being suspended from a long cord and hanging down in front, and the ink-pot and pen-case—or the pen without the case—hanging at the back. Two statues of the noble scribe Amenhetep, from Bubastis (*Bubastis*, Pls. xiii. and xxv. v), are excellent illustrations of this method of carrying the writing outfit.

The meanings of the words written with this sign are “scribe,” “to write,” “to paint,” &c.

Compare PETRIE, *Medum*, Pl. xxiv.

Fig. 19. A plant, ; read   *hm*. From east end of south wall in main chamber of Tomb 2; *B. H.*, I., Pl. xvii., lowest register but one, group  . M.W.B., 1891.

The artist seems to have attempted the drawing of a typical flowering grass or rush, but plant forms are so very strangely and conventionally rendered in Egyptian drawing, that any yellowish flower may have furnished

the model. This is a very unusual form of the hieroglyph .

The sign , syllabic for *hm*, is also the common determinative for names of plants and their parts.

Compare peculiar form in PETRIE, *Medum*, Pl. xv.,   , which is in the same style of drawing as the plants on Pls. xviii. and xxiii.

Fig. 20. The plant of the South, ; read  *res*, and  *qemá*. From east end of south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xvii., eleventh column from left in great list of offerings, group  . M.W.B., 1891.

This sign evidently represents a plant sprouting out of a patch of marsh or water, which is coloured blue. It consists of a central and tall stem, and of four lateral stems, each being tipped with what appear to be three small reddish flowers. Mr. Brown, of the Royal Gardens, Kew, considers that it may be meant for some kind of *scirpus*—sedge.

Both phonetic values of this hieroglyph signify “southern,” or “South Country,” and it is clear that whatever it may have been intended to represent, the plant was at any rate selected to symbolize the South Country, or Upper Egypt.

Compare  in , PETRIE, *Medum*, Pl. x. (not coloured).

Fig. 21. Stand with food, ; read    *udeh*. From east end of south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xvii., towards left of lowest register, group   . M.W.B., 1891.

The figure shows a plain wooden stand with

short legs and straight cross-bar. Upon the stand lies a brownish conical loaf and a circular white cake, while in the middle is a blue-coloured jar for ale or water, standing in a red vase with a blue rim.

The meaning of the word *udch* is a table for food, whether for human use or as a table of offerings for deities.

Fig. 22. Thong or cord, looped at either end, ; read *th*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., great list of offerings (reversed in Fig. 22). M.W.B., 1891.

The strap represented was perhaps of leather, coloured green.

This is the common alphabetic sign for *th*, and occurs only as such.

Compare  in , PETRIE, *Medum*, Pl. xii.

Fig. 23. Fishing boat, ; read  — *uhá*. From north wall of shrine in Tomb 2; *B. II.*, I., Pl. xix., lowest register, group  @. M.W.B., 1891.

The drawing and colouring on this wall is very inferior. This particular hieroglyph represents a light boat, on the water, and containing a net.¹

The meaning of the word *uhá* is "to catch fish or water-fowl," but the sign is used also for many other words having the same phonetic elements with different meanings.

Fig. 24. A lizard, ; read  *asha*. From south wall of main chamber in

Tomb 2; *B. II.*, I., Pl. xvii., second register from top, right-hand end, group . M.W.B., 1891.

The sign represents a green lizard with a slight cresting upon its tail. This cresting, though represented as if on the side, should no doubt be interpreted as on the back of the tail.

The only meaning of the word *asha* is "numerous."

Fig. 25. Symbol of the West, ; read  *Ament*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., sixth column of second row in great list of offerings. M.W.B. 1891.

The figure is difficult to analyse. The part most essential to the sign, and at the same time the most intelligible, is the ostrich feather. It is fixed obliquely in a blue , which possibly represents a cairn, or a mound of earth, and this rests upon a , which is coloured red and is probably of wood. In this instance the  is provided with three cross-bars, but usually they are absent.

The sign means "right-hand" and "West," the cardinal points being fixed by the observer facing the sun at noon.

Fig. 26. Symbol of the East, ; read  *ab*. From same group as Fig. 25. M.W.B., 1891.

The sign represents apparently a wooden stand or table with two white discs lying on it, one at either end, and two ostrich feathers set upright between them. The feathers are not essential to the sign. From the point at which the leg of the stand is inserted there hangs on either side of it a white plume with black markings. It is possible that the "discs" re-

¹ The curved yellow lines are due to an unfortunate misunderstanding in the reproduction of Mr. Blackden's drawing.

present perforations, since $\odot$ *qrrt* = a "hole." This sign means "left," and "East."

Fig. 27. A bag, ; read *g*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., centre of top row in great list of offerings. H.C., 1895.

The sign is doubled to indicate that there were two bags. Both held green eye-paint, according to the inscription, but the one with black lines may have held stibium in reality. They are clearly of skin or leather, sewn at the side and fastened at the top by a strap or thong and loop.

In this instance  forms in reality the determinative of the word  *âf*, "bag," and is not employed for its phonetic value.

Fig. 28. A grape vine, ; read  *ârp*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., seventh column from left in lowest row of great list of offerings. H.C., 1895.

The sign represents a double stem growing out of a pot and supported on two forked uprights, between which are seen two bunches of grapes hanging from the lower branch.

The word *ârp* means "wine."

Fig. 29. A trussed goose in a basket or bowl, : a picture-determinative. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., at foot of columns eleven to fifteen from right, in middle row of great list of offerings. H.C., 1895.

The sign represents a trussed bird, upon which the roots of the feathers are plainly discernible. The vessel upon which it stands may be a basket or bowl, of wood or earthenware.

As a phonetic hieroglyph the sign  reads , "fear"; but it is also the determinative of the word  *nshn*, meaning apparently "to pluck," "to prepare birds for the table." It is here used merely as the determinative of the names of the five species of ducks and geese provided in the list of offerings for the use of the deceased Amenemhat.

Fig. 30. Hippopotamus, ; read perhaps $\odot$  *kheb*, or  *deb*. From east wall of main chamber in Tomb 3; *B. II.*, I., Pl. xxxiv.

The sign serves for the name of the hippopotamus.

Fig. 31. A new-born calf, ; read  *ân*, and  *ââ* (?). From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., third column from right in top row of great list of offerings. M.W.B., 1891.

This sign is the ordinary syllabic for  *ân*.

Fig. 32. An arrow, ; read  *sun*. From north wall of main chamber in Tomb 2; *B. II.*, I., Pl. xiii., right-hand corner at bottom, in group   (The sign has been reversed in this figure.) H.C., 1895.

The shaft is of cane, the joints of which are shown; the end is feathered, and the point was doubtless of flint set in gum.

Fig. 33. A bivalve shell, ; read  *khat*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., sixteenth column from left in middle row of great list of offerings, group   . H.C., 1895.

This sign is certainly intended to represent some kind of bivalve shell, of which the fan

shape is exaggerated; in PETRIE, *Medum*, Pl. xiii., bottom right-hand corner, group , it has the form of a cockle shell. It may here be noted that a small cockle was eaten largely by the early Greek population of Naucratis: I have not, however, seen it in connexion with Egyptian remains.

This hieroglyph occurs, apparently, only in the word *khut*, which is one name for a stand of food or food offerings.

Fig. 34. A bowl or basket, ; read  *hent*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., columns seven to ten of lowest row in great list of offerings, group . M.W.B., 1891.

The  seems to represent a vessel made of wood, such as are shown in several scenes in Tomb 2.¹

The group  *hent*² evidently means a bowl or cup to hold liquids, made perhaps of basket work, but vessels of the same form  are also employed for solid foods.

Compare Fig. 29.

Figs. 35 and 35a. The *Khnem*-ram, ; read  *khnem*. From south wall of main chamber in Tomb 3; *B. II.*, I., Pl. xxxv., lowest register but one in group                  

PLATE IV.

Fig. 37. A cubit-rod (?), ; read  *maá*. From west end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xviii., inscription in large characters above the lady Hetept, in group . The sign appears to have been reversed in the copy. M.W.B., 1891.

The hieroglyph seems to represent a measuring or ruling rod, with bevelled edge along one side; this edge is shown in impossible perspective at the end, the drawing attempting to combine side view with end view. Such is the opinion of Professor PETRIE; see *Medum*, p. 32. In the Medum paintings the sign appears simply as a straight bar, and the bevelling is not shown.

 *maá* means "straight," "correct," "just" (compare Isaiah xxviii. 17).

Fig. 38. A vessel or jar for wine or ale, . From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., seventeenth column from right in lowest row of great list of offerings, below group . H.C., 1895.

The figure represents an earthenware vessel, the base rounded, the mouth apparently stoppered with some kind of plaster, marked with spiral bands of black and white.

The word  , of which  here appears to be the determinative, occurs in the form     in BRUGSCH, *R. n. d. Grossen Oase* Pl. xvii., 11.

Fig. 39. Hooked instrument or key for "opening the mouth" of the deceased, , called   *krf-pesesh*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., eighth column from left, in top row of great list of offerings. H.C., 1895.

The sign is a "picture-determinative," and represents the instrument as made, apparently, of black stone. The "opening of the mouth" was an important ceremony in the Ritual of the Dead.

Compare Fig. 42.

Fig. 40. A bandage, ; named  *ukhu*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., thirteenth column from left, in middle row of great list of offerings. H.C., 1895.

The sign represents a strip or roll of whitish linen, fringed at one end. Like the last, it is a picture-determinative.

Fig. 41. A unit line, . From south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., inscription in large hieroglyphs. M.W.B., 1891.

As here occurring, the sign has exactly the outline of the wooden clamps used in stone buildings, and the red colour may indicate wood as the material.

This hieroglyph is the determinative of unity and the symbol of a unit. Doubled it denotes

the dual, trebled the plural. In PETRIE, *Medum*, Pl. xvi. (table of offerings), see also p. 33, pieces of rope appear to represent units. These are not, however, the ordinary signs of units, but special determinative forms in connexion with the various textile offerings made to the deceased. The ordinary form of the plain numeral may be seen on the same plate.

Fig. 42. A key (?), ; read  *reteh*,  *khener*. From south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., seventeenth column from right in top row of great list of offerings, in group . In Fig. 42 the sign has, by error, been placed upright. M.W.B., 1891.

The figure seems to represent a straight-handled instrument coloured red for wood and ending in two hooks—perhaps a key. It might, however, correspond to the wooden slave-pole by which prisoners are secured in the interior of Africa.

The meanings of the words *reteh* and *khener*, are “to imprison,” “to close up,” &c.

Fig. 43.  human arms , read in this case  *ka*, embracing the sign , read  *hen*, the whole reading *hen-ka*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., upper register right-hand corner. M.W.B., 1891.

In this composite sign the arms represent  *ka*, the symbol of the *ka* or Double, and the sign  *hen* means “servant.”

The compound hieroglyph *hen-ka* signifies

“servant of the *ka* or Double,” and is often written .

For the sign , see Fig. 44.

Fig. 44. A club, ; read  *hen*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., foot of second column of inscription in large characters over Amenemhat, group . M.W.B., 1891.

The black colour of this sign would apparently exclude it definitely from its usual classification among figures of vessels; it rather seems to represent a club of some hard and dark wood, such as is now brought from the Sûdân.

The principal meanings of the word *hen* are: (1) “servant”; (2) “majesty,” in the phrase  *hen f*, “His Majesty,” as an expression for the king.

Probably the object represented by the sign was one of the many symbols of authority which the monarch wielded and to which the slave was subject.

Fig. 45. A bearer of offerings, . From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., foot of sixth column from right in top row of great list of offerings. M.W.B., 1891.

The sign represents a man seated on the ground, holding behind him a circular cake: only one arm is shown in the drawing.

This is not an ordinary hieroglyph, but a pictorial determinative of the name of the word  *âdat*. In other lists of offerings the mode of presentation of the *âdat* is indicated by the words  or  *ha*, *ha-k*,

"behind," "behind thee," following the name.¹ In the present instance this direction is omitted, but its equivalent is given by the determinative.

Fig. 46. A hide, water-skin, ; read  *shed*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., second register from top, to right, group . M.W.B., 1891.

This sign has been noted, PETRIE, *Medum*, Frontispiece, fig. 5, p. 30, as representing a hide stripped from an animal, the skin of the legs forming straps and the skin of the neck hanging down.

The principal meanings of the word *shed* are a "water-skin," and "to pull," "to draw."

Fig. 47. A paddle, ; read  *sher*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pls. xvii. or xviii., inscription in large hieroglyphs, last line. M.W.B., 1891.

The blade of the oar was made apparently of a harder and darker wood than the shaft. The butt end was evidently grooved, or lashed round with cord to improve the hold or prevent splitting.

The sign is used as a syllabic for  *sher*, but rarely except with the meaning "voice."

Compare PETRIE, *Medum*, Pl. xi., group .

Fig. 48. A water-jar on stand, ; read  *qebeh*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., inscription of top register, to right. M.W.B., 1891.

This sign represents a vase of red pottery with water pouring from the spout, in a

wooden (?) framework stand coloured black. Contrary to the usual practice, the water is coloured black.

The words  *qeb*,  *qebeh*, which are written by this sign, mean "cold water," "coolness," &c.

Fig. 49. A bolt, ; read *s*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., first column from right in top row of great list of offerings, group . M.W.B., 1891.

This hieroglyph represents the wooden bolt of folding doors as shown in wall paintings, models of shrines, &c. The bolt was simply passed through a loop on each door, and thus made a temporary fastening, easily removed altogether when the doors were thrown open. The projections in the middle served both as handle and stop; the straight black lines continued through these projections in Fig. 49 are probably only the guiding lines of the artist, and have no structural meaning.

The sign is alphabetic for *s*, and had originally a phonetic value distinct from that of ; but the two had become convertible before the commencement of the Middle Kingdom. Besides its alphabetic character, it serves also occasionally as the determinative of the word

 *qert*, bolt.

Fig. 50. An arm, and hand grasping spatula, ; read  *zeser*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., fourth column from right in middle row of great list of offerings, group . M.W.B., 1891.

¹ DÜMICHEN, *Perduamenap*, Pl. xxii.

This hieroglyph represents a human arm, invariably bent at an obtuse angle, the hand holding a wooden (?) instrument with white spatulate blade and narrow handle, having a short cross-bar near the end. The cross-bar is seldom seen in this hieroglyph, but occurs on the handle of the royal sceptre at Deir el Bahari.¹ Since the word *zcsert*, when occurring in lists of offerings, is believed by some to mean butter or cheese, it is further suggested that this instrument with its white blade may well have been a mixer or beater used in the preparation of such food. This explanation is, however, very doubtful. That the spatula required a considerable amount of force in its application is evident from the variant, common from the earliest times, in which it is shown as held by both hands, .

Another and common meaning of the word *zaser* is "sacred," "distinguished from and prohibited to the vulgar or profane," &c.

Fig. 51. Cord (wound on stick or in a
hank), ; read   *ud*. From east end
of south wall in main chamber of Tomb 2;
B. H. I., Pl. xvii., lowest register, to left, group
  . M.W.B., 1891.

The figure, when compared with Fig. 61 below, has the appearance of a narrow roll of papyrus, bound only round the centre, and sealed with a large clay seal, which is seen from the back; but its real nature is shown by other examples. At Médân Mr. Petrie recognised in it a stick for winding string

upon, and later forms, more or less of the type , show the curved end of the string. Until other coloured examples are attainable, it will remain doubtful whether  represents a hank of cord or a string wound upon a stick. The white colour of the main portion is against wood being the material.

The word  *ul*,² variously interpreted by different writers, can now be seen to mean cord or hank of rope, and garland or string of flowers and leaves. It is thus the origin of the syllabic value *ul* for .

Compare PETRIE, *Medum*, Pl. xiv., group
 (uncoloured), and p. 32.

Fig. 52. A coil of rope, ; read  shen.
From north wall of main chamber in Tomb 3;
B. II. I., Pl. xxx, second register from below
group . H.C., 1895.

The sign, though coloured black, presumably represents rope, or perhaps a coil of leather strapping.

This hieroglyph is a determinative of words meaning "to tie," "to bind," &c.; but the meaning of the word shen, which is spelled by it, is still uncertain for us.

Fig. 53. A hand, ; read *d*. From south wall in main chamber of Tomb 2; *B. II. I.*, Pl. xvii., sixth column from right in top row of great list of offerings, group               

The hand is drawn with the palm upwards.

² See excellent examples in *Rec. de travaux*, xvi., 98, collected by LORET, who missed the meaning by a hair's breadth.

¹ NAVILLE, *Deir el Bahari*, pl. xiv., &c.

The length of the thumb is, as usual, curiously exaggerated.

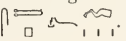
The name of the hand in Egyptian is  *det*. It would seem as though this alphabetic sign were acrophonic, i.e., that its phonetic value is derived from the first letter of its name.

Compare PETRIE, *Medum*, Pl. xiii., &c.

Fig. 54. Extended human arms holding polishing-stone or corn-rubber, ; read  *sekhen*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., sixth column from left in bottom row of great list of offerings, group . M.W.B., 1891.

The bent and extended arms are perhaps holding the upper stone of a "saddle quern" for triturating corn; see side view of this operation on south side of west wall in Tomb 2; *B. II.*, I., Pl. xii., third row from bottom to right of false door.

The meaning of the word *sekhen* appears to be "to embrace," &c., as if with both arms. The stone for grinding or polishing, , is probably not essential to the symbol.

Fig. 55. The shoulder and fore-leg of an animal, ; read  *khepsh*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., long column to right in great list of offerings, group . M.W.B., 1891.

This sign is often called the haunch, which, obviously, it is not. It is a picture of the fore-leg of an ox or other animal cut off at the shoulder joint and skinned down to the hock.

The meaning of the word *khepsh*, spelt by this sign, is "shoulder," "arm (of strength)"; but since the outline of the Egyptian scimitar is somewhat similar to that of the shoulder and fore-leg, this also bore the same name.

Fig. 56. Plan of a house, ; read  *per*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., twelfth column in top row of great list of offerings, group . M.W.B., 1891.

The plan is of a rectangular building, with entrance in the middle of one of the longer sides. From the proportional size of the entrance, it is clearly the plan of a single chamber, and not of a great enclosure.

The meaning of the word  *per* is "house," "chamber."

Compare PETRIE, *Medum*, Pl. xi., &c.

Fig. 57. Front view of mouth, ; read *r*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., fourth column from right in middle row of great list of offerings, group . M.W.B., 1891.

This sign represents the mouth with open lips.

The Egyptian name for the month is  *re*, and  was taken as the ordinary alphabetic sign for *r*. The same word means "gate," "orifice," &c.

Compare PETRIE, *Medum*, Pl. xi., &c.

Fig. 58. ; read  *uden*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., ninth column from left in middle row of great list of offerings, group . H.C., 1895.

The form of this sign suggests a tube with broad mouthpiece; but this seems a very unlikely product of Egyptian handiwork.

 *uden*, as a verb, apparently means "to offer," to deities or deified dead.

Fig. 59. Human arm, ; read *â*. From south wall of main chamber in Tomb 2; *B. H.*, I., Pls. xvii., xviii., inscription in large hieroglyphs. H.C., 1895.

The drawing of the hand is as in Fig. 53, but displays the back instead of the palm, and shows the nails. In this hieroglyph the arm is bent at right angles, invariably.

This is the ordinary alphabetic sign for *â* (Hebrew *א*, Arabic *ع*);  being an ordinary word for the hand or arm.

Compare Fig. 17, and PETRIE, *Medum*, Pl. xiii., &c.

Fig. 60. Human mouth viewed from side, ; read *khent* (?). From south wall of main

chamber in Tomb 3; *B. H.*, I., Pl. xxx., second register from below, in group . H.C., 1895.

This sign is probably the phonetic equivalent of *ḥ* (the nose), and thus has the value *khent*, "the front," &c. In very late texts it is equivalent to  = *r*, Fig. 57.

Fig. 61. Papyrus roll, ; read  *shât*. From south wall of main chamber in Tomb 2; *B. H.*, I., Pls. xvii. or xviii. M.W.B., 1891.

The roll of papyrus represented is evidently a large one, carefully bound round with a long strap, and sealed. The sign doubtless represents a book or long document. In early inscriptions it is always placed horizontally.

 *shât* means a book or writing. The sign  is very common as the determinative of abstract things, which can be described but not pictured.

PLATE V.

Fig. 62. Battlemented building, in plan, ; read  *usekht*. From east end of south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xvii., eighteenth column from left in middle row of great list of offerings. H.C., 1895.

The structure of the sign is not very intelligible. The thick black lines may be taken to represent brick walls. They form three sides of an enclosure, while three shorter walls form a square against the inner face of one of the side walls. This square block, which is

crossed by a diagonal abutting against one of the outer sides, occupies about one-half of the open space. The architectural meaning of the diagonal is uncertain; but in the interior of the pyramid of El Lahûn the rubble core is held together by lines of masonry, of which the principal ones are two diagonals in the square. The white projections outlined in red appear to represent overhanging battlements of wood, such as are shown in *B. II.*, I., Pl. xiv.

The hieroglyph is read *usekht*, which usually means "wide chamber," "hall." In the present instance, as often, the phonetic sign, $\square$ *usekht*, is placed within the larger sign, in the entrance passage between the battlemented walls.

Fig. 63. A kuife or chopper, ; read  *nem*. From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., fifteenth column from left in lowest row of great list of offerings. M.W.B., 1891.

The blade is represented as black, with a yellow edge. The yellow edge may be intended to show the transparency of the thinned material, or perhaps to indicate that the cutting edge was set in a backing of some different material. The handle is peculiar, being in the form of an inverted cone.

The word *nem*, spelt with this sign, has the meanings (1) "diminution," (2) "wine-press," and "wine-store or cellar." It is doubtful whether these words have any radical connexion with the sign , which is the usual syllabic for  *nem*.

Compare Fig. 65.

Fig. 64. A fire-stick (?), ; read  *za*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., to right of lowest register, group . M.W.B., 1891.

Since this example has been known to us we have regarded the sign as representing a fire-stick, and this view has been endorsed by several authorities to whom it has been submitted. The two members of which the figure is composed are evidently of wood, and the blackened circular holes in them are strongly suggestive of the fire-stick (see PETRIE, *Illahun, Kahun, and Gurob*, Pl. vii., p. 11). Fire was produced by the rapid revolution of the upper stick upon the lower, and it is therefore curious that holes should be indicated in the upper as well as in the lower. But any piece of dry wood would serve as a matrix, and the drill itself is often turned to this use in Australia.

The sign  is the ordinary syllabic for *za*.

Compare Fig. 68, and PETRIE, *Medum*, Pl. xxviii. 1.

Fig. 65. A knife, . As Fig 63 (but from sixteenth column from left). H.C., 1895.

Fig. 66. A box, or chest, . From east end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xvii., twelfth column from left in great list of offerings. H.C., 1895.

The box represented is made of a framework of stout wood, filled in with thin panels; the tops of the corner posts project; the lid is curved.

The sign is here the determinative of the word , box.

Fig. 67. The sceptre of Thebes, ; read  *uas* (?). From south wall in main chamber of Tomb 2; *B. H.*, I., Pl. xvii., fourth column from right, in middle row of great list of offerings. M.W.B., 1891.

The sign is composed of the sceptre *zām*, or *uas*, , with an ostrich (?) feather added below the head. The sceptre was evidently made from a forked branch, the top or handle consisting of a piece cut out of the trunk at the base of the branch. The colouring is yellow spotted with black, as if the original object had been covered with panther hide; but perhaps this mottling may indicate only the markings of the bark.

This sign, the phonetic value of which is uncertain, is found only in the name of the Hermonthite nome, and of western Thebes, which lay within that nome.

Fig. 68. A fire-stick,  *za*. From north or south wall in main chamber of Tomb 3; *B. H.*, I., Pl. xxx., lowest register, right-hand end, or Pl. xxxv., second register from below, group . H.C., 1895.

The sign apparently shows the drill placed in the matrix, the drill being in this instance represented, perhaps, as roughened by vertical lines or facettings, and grooved round the middle.

Compare Fig. 64.

Fig. 69. A slug (?), ; read *f*. From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xviii., inscription in large hieroglyphs, group . M.W.B., 1891.

This sign represents a nondescript animal,

which has often been called a cerastes or horned snake; but the bluntness of the head, the smallness of the mouth, and the general form, are all against this view. The "ears" are not like such appendages of any animal known to us, but may probably be a reminiscence of the contractile eye-stalks of the slug. The form and colouring as a whole recalls one of the large yellowish slugs met with in Mediterranean countries, though I am not aware that they are now found in Egypt. The eye in the head would then be an absurd addition. But an animal exactly like that of this hieroglyph is figured by PRISSE¹ (coloured pale brown on the back and white beneath, with dark spots), crawling up a papyrus stem, and there it is evidently intended for a slug.

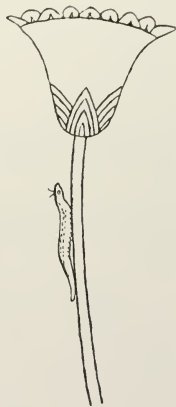
The scene in which it occurs is from a Theban tomb, at Drah Abu'l Nega.

This sign is apparently used only as alphabetic for *f*.

Compare PETRIE, *Medum*, Pl. xxiv.

Fig. 70. A knife, ; read  *set* (?). From same inscription as Fig. 69. M.W.B., 1891.

¹ *Histoire de l'Art Égyptien*. The plates in PRISSE are not numbered (in the copy in the Edwards Library the plate in question bears the number 87).



The colouring of the edge of the blade is the same as in Figs. 63 and 65; the black portion of the blade is in one piece with the curved handle. The latter is of a form which would have been too brittle for use if executed in hard stone: the material coloured black must have been either metal or wood.

The sign is apparently to be read $\overline{\text{—}}^{\text{—}}$ *set*. Compare inscription on south architrave of main chamber in Tomb 3; *B. H.*, I., Pl. xxiv., where this sign stands as the name of a locality, and its meaning must be "valley," "ravine"—a thing cleft or, as it were, cut out with a knife.

Fig. 71. Harpoon-head of bone, $\overline{\text{—}}^{\text{—}}$; read $\overline{\text{—}}^{\text{—}}$ *ges*, *qres*. From north wall of shrine, Tomb 2; *B. H.*, I., Pl. xix., top inscription, right-hand side, group $\overline{\text{—}}^{\text{—}}$ $\overline{\text{—}}^{\text{—}}$ $\overline{\text{—}}^{\text{—}}$. H.C., 1895.

The head of the harpoon is represented as double barbed, one barb being at the point and the other above; in fact, it might be called a double hook, the point being very obtuse and the barbs set at a rather wide angle. At the butt end are two pegs to facilitate the binding of the head to a wooden shaft. Harpoon-heads of bone are very frequent among savage tribes,¹ and the colouring of this example agrees well to that material.

The meaning of the word *ges* is "bone." The rest of the harpoon being of wood, evidently the head was called the *ges*, or

"bone" of the harpoon, and hence the picture of it served for writing the word *ges*, "bone," and to express the sound *qes*, *qres*, as a syllabic.

Fig. 72. An ostrich feather, $\overline{\text{—}}^{\text{—}}$; read $\overline{\text{—}}^{\text{—}}$ *shu*, and $\overline{\text{—}}^{\text{—}}$ *maât*. From east end of south wall in main chamber of Tomb 2; *B. H.*, I., Pl. xvii., third column from left, in middle row of great list of offerings. H.C., 1895.

The quill of the feather is well shown; the plumules are outlined in black, and are marked with a brownish dash at intervals.

The name of the feather is $\overline{\text{—}}^{\text{—}}$ *shut*. The root *shu* appears in other words with the meanings "emptiness," "desert," "dryness." The origin of its value *maât*, with the meaning "truth," is more obscure; but the feather was certainly a sacred emblem, and appears from earliest times on the head of the goddess *Maât*.

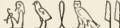
Fig. 73. An adze chopping, $\overline{\text{—}}^{\text{—}}$; read $\overline{\text{—}}^{\text{—}}$ *setep*. From south wall in main chamber of Tomb 2; *B. H.*, I., Pl. xvii., first column to right in great list of offerings. M.W.B., 1891.

The handle is represented as of choice dark wood, with ochreous graining; the yellowish blade, flint or copper (?), is bound to the handle with strong lashing. Beneath the blade is a block of wood in which a deep hollow has been made by the tool.

The only known meaning of the verb $\overline{\text{—}}^{\text{—}}$ $\overline{\text{—}}^{\text{—}}$ is "to choose."

Compare PETRIE, *Medum*, Pl. xi.

¹ Mr. PETRIE found them of ivory in the graves of the "New Race" at Negâdeh.

Fig. 74. Watchman, ; read *sau*. From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xvii., to right in lowest register, group . M.W.B., 1891.

The figure represented is probably that of a well-cared-for servant, wearing long hair carefully kept, and having a small square beard. He is seated, and to keep off the cold as he sits he is completely wrapped to the neck in a white garment. The hand only is free, and holds a curved rod, near the end of which is a loop, probably of cord; possibly this was a badge of office signifying that he had the right to beat and bind.

In this instance the group  *sau* means "herdsman," but the word was used of other sorts of guardians. Apparently also the same hieroglyph is used for  *ari*, which means "that which is concerned with," often in the sense of "an official belonging to" a department, and so not unlike *sau* in meaning.

Compare PETRIE, *Medum*, Pl. xxviii., and p. 29.

Fig. 75. A divine lioness, ; read Pakhet(?). From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xviii., inscription in large hieroglyphs. M.W.B., 1891.

This sign is composed of (1) a lioness couchant, , upon (2) a base, , of angulated outline, diminishing in width below, and (3) the badge of divinity, , *neter*. (1) and (2) are coloured a uniform yellowish brown. The lioness was probably a votive figure of no great size, and may have been of stone, wood, or pottery. (3), the , is represented in its proper colours. The

object seems to consist of a staff wrapped round with a band of linen, the end of which projects stiffly like a small flag. It may here be noted that the sign  *neter*, "god," "divine," is never shown in early paintings as an axe, though axes of the same form, found in Egypt, are well known. Compare PETRIE, *Medum*, Pl. xxiv.

The entire sign is evidently a name of the goddess Pakhet, worshipped at the Speos Artemidos near Beni Hasan. The uniform colouring of lioness and base indicates that there was no intention of portraying a real animal, but only a sacred figure of one on a vase, or vase-shaped stand, dedicated in the temple of the goddess by some pious king or nomarch.

Fig. 76. Plan of a city (?), ; read  *net*. From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xviii., inscription in large hieroglyphs, group . M.W.B., 1891.

This sign is formed by a thick circular belt, coloured black, from which four double angulated lines, also black, project symmetrically into the enclosed space, leaving only a narrow cross and four narrow chevrons white. There can be little doubt that the sign is a primitive symbol, highly conventionalized, and intended to represent the plan of a village with its streets and thick enclosing wall.

The word  *net* means "city," "village," &c., and, as in the present case,  is the determinative for names of such.

Compare PETRIE, *Medum*, Pls. xi., xiii.

Fig. 77. Angulated club, ; read  *gema*, &c. From south wall of main chamber

in Tomb 2; *B. H.*, I., Pl. xvii., seventh column from right in top row of great list of offerings. M.W.B., 1891.

The colouring of this sign indicates that the original object was made of black wood with paler graining, and is suggestive of weight. The form of the object is quite different from that of the boomerang.

It is not obvious why this sign has the value *gema*, meaning "to create." It may easily be confused with several signs of similar outline, but differently coloured.

Fig. 78. A loop of cord, ; read  *shen*. From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xvii., eleventh column from right in top row of great list of offerings. M.W.B., 1891.

This is the regular syllabic for *shen*. The meaning of the root *shen*, "to encircle," is perhaps connected with the origin of the sign.

Fig. 79. A seated woman, . From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xviii., inscription in large hieroglyphs. M.W.B., 1891.

The woman is sitting on the ground with the knees raised; the whole body, to the neck, is completely covered with a white garment. The hair is black and long; the colour of the skin is redder in Mr. Blackden's copy than in the lithograph.

The sign is used as the determinative of feminine proper names, and of words meaning "woman," &c.

Fig. 80. A man working a bow drill, , reading  *mer set*. From north wall of main chamber in Tomb 17; *B. H.*, II., Pl. xiv., vertical inscription to left. M.W.B., 1891.

The man represented is seated on the ground. In his left hand he holds the black stone cap of a drill, and works the drill by means of the bow in his right hand. The object to which the instrument is applied is the symbol of a mountain or desert, .

This punning hieroglyph, which is of course unique, expresses *mer set*, "governor of the desert,"¹ the symbol of the desert hills, *set*, being combined with a pictorial representation of the action of a drilling, and this, or the drill itself, having probably been called *mer*.

Fig. 81. Sacred emblem, ; reading unknown. From south wall of main chamber in Tomb 2; *B. H.*, I., Pl. xvii., inscription in large hieroglyphs. H.C., 1895.

The figure is of a short staff or club, surmounted by a human head with cow's ears and very slender horns coiled at the extremities. Round the neck is wrapped a cloth, which hangs in a long fold at either side. From the uniform colouring, we may suppose that the amulet was entirely of wood, copied in that material from such a combination as we have just described, and partly painted.

¹ The fantastic inscription in which this hieroglyph occurs reads: *was nek del ankhh, mer-k hehu nu (?) hemut sept bau-k rekhh seten Khety, mer set ähtet, än khert äb seten, mery Hro hi rekht, Khety, "Power to thee, stability and life! Mayest thou love millions of women may thy wit be ready, O friend of the king, Khety, governor of the Eastern desert, bringing the desire of the king, beloved of Horus who smites the people, Khety!"*

PLATE VI.

Fig. 82. Priest and ape, . From east wall of main chamber in Tomb 14; *B. II.*, I., p. 85. P.E.N., 1891.

A man clothed in a leopard skin, the tail of which is seen hanging between his legs, is standing before a tailed cynocephalus erect on its hind legs. The right hand of the man is stretched out to meet the right paw of the animal.

This curious and unique hieroglyph is the determinative of the priestly title  *An-met-f*, "pillar or support of his mother." Several of the hieroglyphs in the same inscription are of rare form, but there is nothing particularly playful about them, as in the tomb of Khety (Tomb 14), and we may therefore conclude that this is a serious picture of one of the functions of the *An-met-f*, and not a mere rebus. The animal taking part in this function may of course have been a man or woman dressed in mask and skin, but the tail contradicts the apo-like character of the rest of the appearance.

 *An-met-f* seems to be the equivalent of , with variants , ,  *An-kent*, *An-kenemt*, "pillar or support of *kenemt*," of the earlier texts; and *kenemt*, according to Mr. Crum, is probably a

species of ape.¹ The present hieroglyph, which was at the time of his writing on this point quite unknown to Mr. Crum, forms a new and important piece of evidence as to the meaning of the title *An-met-f*, and confirms in the most striking manner his conclusion as to the meaning of . The panther skin was the regular vestment of the *An-met-f*.

From the above considerations we may deduce the following conclusions:—(1)  refers to the cynocephalus as pictured in the hieroglyph. (2) ,  is a synonym for  in this title, and likewise refers to the cynocephalus. (3)  and  being synonymous, it is preferable to regard them as a compound of two substantives in a genitive relation, one possessing and one lacking the genitive exponent, . (4) In early writing  often = , "Double," so *ka-met*, *ka-en-met*, "mother's Double," "Double of the mother," will be a reasonable solution of the two forms of this word. The early form of the title therefore described the priest as the pillar (support) of the *ka* of the mother: in the later title he is "the pillar of his mother," the ape at first called the *ka* of

¹ *Proc. Soc. Bib. Arch.*, xvi., 136; and for  and , cf. LUSHINGTON, *Trans. Soc. Bib. Arch.*, vi., 526 *et seq.*, vii., 366.

the mother being regarded later as the divine mother of the priest officiating. The precise significance of this female ape in the Egyptian mythology is quite unknown.

Fig. 83. A flower . From east wall of main chamber in Tomb 14; *B. II.*, I., p. 85. P.E.N., 1891.

This rare hieroglyph forms part of a place-name,  ; and a variant of it is found in the exterior inscription round the door of the entrance to the main chamber in Tomb 2; see *B. II.*, I., Pl. vii., fifth line of architrave inscription. In the latter instance the hieroglyph is of somewhat different form, and shows three short wavy lines rising out of a deep pot, . The reading is unknown, unless it be the   *bu* of   in the long horizontal inscription at the top of the north wall in main chamber of Tomb 2.¹

Fig. 84. Fork, on emblem of gold . From east wall of main chamber in Tomb 14; *B. II.*, I., p. 85. P.E.N., 1891.

The lower sign is the ornamental collar which commonly stands alone as the sign for *nub*, "gold," or grouped with other signs as the determinative of other precious metals, e.g.  *hez*, "silver,"  *uasem* (?), "electrum." The upper sign represents some forked object, but its precise nature is difficult to determine.

This unique group is from a title of Hathor, as mistress of , and probably represents a place-name.

For , compare PETRIE, *Medum*, p. 33.

Fig. 85. Symbol of fire, . From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., fourteenth column from left in middle row of great list of offerings. H.C., 1895.

This sign shows a tall, curved, and tapering flame (?) rising from a red disc; below and on each side of the disc is a short, straight-edged and expanding projection. The sign is difficult to interpret. The upper part probably represents a long tongue of flame curving over and ending in a narrow downward stream of smoke and soot.

This sign is the determinative of words meaning "fire," "flame," &c.

Fig. 86. A throne, ; read  *set*,  *s*, and  *htm*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., fourteenth column from left in middle row of great list of offerings. M.W.B., 1891.

The blue colour of this hieroglyph is somewhat inexplicable.

The word *set* means "seat," often with a wide sense of locality. The sign occurs as the symbol of Isis, whose name in Egyptian is read *set*. It seems, generally, to imply a semi-vowel or vowel before the *s*; the *t* is not invariably implied.

Fig. 87. A screen, , called  *kap*. From south side of east wall in main chamber of Tomb 3; *B. II.*, I., Pl. xxxiv., middle line of long vertical inscription. M.W.B., 1891.

A picture of the fowling-screen referred to in the inscription from which this hieroglyph is taken is given in the centre of the same wall; *B. II.*, I., Pl. xxxiii. The screen itself was pro-

¹ *B. II.*, I., Pl. xiii.

bably composed of reed-stems bound together, small holes being left at intervals for sighting the wild ducks. (In Fig. 87 the sign has been printed upside down.)

The root  *kap* means "to hide."

Fig. 88. A water-channel or pond, ; read  *hm*. From west end of south wall in main chamber of Tomb 2; *B. II.*, I., Pl. xviii., inscription in large characters. M.W.B., 1891.

The sign appears to represent the section of a water-channel, or well, or pit, coloured blue to represent the black alluvial clay, containing water, which is indicated by wavy lines.

The word *hmt* means woman.

Fig. 89. A drill cap (?), ; read *t*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii. or xviii. M.W.B., 1891.

Professor Petrie believes this sign to represent the cap of a drill, and as yet there is no evidence to the contrary. (The sign was really coloured a bluish grey; in the plate it is too green.)

 has the phonetic value *t*, and is not found except as an alphabetic sign.

Compare PETRIE, *Medium*, p. 32.

Fig. 90. A band with pendants, ; reading uncertain. From east wall of main chamber in Tomb 14; *B. II.*, I., p. 85. P.E.N., 1891.

It is difficult to determine precisely the original object from which this sign was derived. The bluish drops at either end would seem to be ornamental pendants.

This is the only known occurrence of this

hieroglyph, and here it occurs only in a place-name.

Fig. 91. Woman with basket or shell (?) . From north side of east wall in main chamber of Tomb 3; *B. II.*, I., Pl. xxxii., bottom of first column to left. H.C., 1895.

The woman is clothed in the usual dress, suspended from the shoulders. Her hair is long, and in it is an ostrich feather, coloured yellow. Her left arm hangs straight by her side; in her right hand is a mussel shell (?) (compare Fig. 33). The manner in which the last-named object is held indicates something stiff, rather than a basket.

This sign occurs only in a single place-name, found also at Asyût; see GRIFFITH, *Inscriptions of Siût*, Tomb 3, Pl. xi., l. 16, where  should probably be read at the end.

Fig. 92. White corn on vase of offerings, ; picture determinative. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., tenth column from right in lowest row of great list of offerings, group   . H.C., 1895.

The grains are white, without any indication of a wrinkle. The name is "white *sesht*." In the next column of the list is another variety of *sesht* or corn, named "the green"; but Mr. Carter states that the determinative there is identical with this figure.

For the vase, see Fig. 3-4.

Fig. 93. Green corn on vase of offerings, ; picture determinative. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii.,

sixth column from right in bottom row of great list of offerings. H.C., 1895.

The name of this wrinkled corn is *baut*. Mr. Carter states that in the seventh and eighth columns yellow-coloured corn is given for the *ât âgt*, and red for the *set âgt*.

Fig. 94. "Two lands," ; read  *tau*. From south wall of main chamber in Tomb 2; B. H., I., Pl. xviii., inscription in large characters. M.W.B., 1891.

This group is only the dual of  *ta*, "land," which means in general "ground," "earth," but also alluvial land, flat land, as opposed to , hilly undulating land, desert. The Delta was typical for its flat alluvial land; but Upper Egypt also was sometimes called *ta*, even at an early date, and Upper and Lower Egypt are constantly named , "the two lands," a phonetic variant of which is , the plants of the north and south. In course of time the use of the word became less restricted, and was frequently applied to foreign lands.

Besides standing for *ta*, "land," the sign  has a determinative force. Its appearance in the groups ,   has led to one false explanation after another, even in the latest text-books; it is therefore worth while to point out the fact that symbols of space were used by the Egyptians to express ideas of time. Thus, time-words determined by , the picture of the sun, not unfrequently have  added, exactly as if they were words denoting space,  being the usual geographical determinative in early times. This determinative indicates, perhaps, a limited space,

and so, by transference, a definite period of time. In the word for "eternity,"  *zet*, or reduplicated   *zetzet*, no time-determinative is used; but the views in the Delta, with boundless horizon, suggested an appropriate idea, and , the sign of flat land, was consequently attached to these words in order to convey the notion of unlimited time.

Fig. 95. Vase on legs, ; read  *ân*. From south wall of main chamber in Tomb 2; B. H., I., Pl. xvii. or xviii. M.W.B., 1891.

The vase, presumably of stone, is coloured blue; it is supported on a pair of elongated human legs, represented as without knees.

This is a compound symbol of a rare class. Two explanations of it are possible, and it is difficult to say which of the two is correct. On the one hand, it may be explained as consisting of two elements that cannot be so combined in nature, brought together in order to indicate a certain combination of meanings; for the word  *ân* means "to carry," and this sense is conveyed by the combination of the idea of a vase with that of motion. On the other hand, the sign may be simply the abbreviation of a picture of a man carrying a vase, in which only the most essential parts are preserved.

Compare PETRIE, *Medum*, Pl. xxvii.

Fig. 96. A woman of the marshes, ; read  *sekh*. From south side of east wall of main chamber in Tomb 3; B. H., I., Pl. xxxiv., inscription under cornice. H.C., 1895.

The woman, clothed in the usual dress sus-

pended from the shoulders, holds in her right hand a captured wild-fowl by the wings, and in her left a lotus flower or a bunch of water-plants.

This hieroglyph is here used to denote the goddess Sekhet, the goddess of the marshes, who presided over the occupations of the dwellers there.¹ Chief among these occupations must have been the capture of fish and fowl and the culture and gathering of water-plants, especially the papyrus and the lotus.

Figs. 97-101. Five jars or vessels, varying in form and material, . From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., columns thirteen to seventeen from left, in top row of great list of offerings. H.C., 1895.

Seven vases of different sacred oils are generally figured among the offerings; the jars here represented are vessels for containing the first five of these oils, and are in this case used as the picture determinatives for their names. Each jar is carefully tied up and the knot sealed with clay, the lid being, no doubt, a separate disc. The stopper is made air-tight by a large piece of material reaching half-way down the body of the vase, and terminating there in a wavy edge. This material, which is tightly stretched and clings closely to the vase, is clearly the skin of a goose or other bird from which the feathers have been plucked.

These vessels may be classed as of three forms. 1 and 2 are of the shape known as

bes, a simple jar form; and 6 and 7, which are not given in the plate, are similar but taller. 3 has the shape of  *ab*, the heart vase. 4 and 5 are of the *khnem* form, , i.e. jug-shaped, but without spout, and having a loop in front through which to pass the tie (compare Fig. 35); the base of one is flat, of the other rounded.

These jars are sometimes found made of wood, painted to imitate stone. The veined white material was doubtless alabaster, the bluish some sort of dark stone, possibly diorite. The clouded white material of which the , or heart-shaped vase, is made is difficult to determine, but it might be another variety of alabaster.

The forms of these vessels vary in the different lists: there seems to have been no prescribed connexion between the shape or material of these jars and their contents.

Figs. 102, 103. Part of the back of a fish, ; read  *kem*. From south wall of main chamber in Tomb 2; *B. II.*, I., Pl. xvii., great list of offerings, Fig. 102 in bottom row to left, Fig. 103 in fifth column from left of middle row. H.C., 1895.

Fig. 103 shows fish-scales clearly, and the spines seem to prove that the sign represents part of the back of a fish, though the form of the slice is peculiar; possibly it represents a select morsel of the thickest portion taken out of the back.

Fig. 102, with its blackish colour, may represent a similar portion, viewed from the inside, of a fish which has been cut open, smoked and dried.

¹ *El Bersheh*, I., p. 31, note.

The sign reads *kem*. The common meaning of it is "black," also "to complete."

Fig. 104. , read  *rie* and  *de*.
From south wall of main chamber in Tomb 2;
B. II, I, Pl. xvii., inscription in top register.
M.W.B., 1891.

This sign is very difficult to explain. The

base of the triangular figure is blue, the colour used to represent dark stone, &c.; the sides are black, and the small triangle standing on the middle of the base is likewise black. The sign is read *de* and *rie*, and means "to give," "to place"; it is often placed upon the hand in the sign , which has the same value and meaning as .

II. THE MANUFACTURE AND USE OF FLINT KNIVES.

PLATES VII.—X.

The last four plates contain portions of scenes relating to the manufacture and use of flint knives. Plates vii. and viii. are facsimiles from copies made by Mr. Carter and Mr. Brown in 1895. The work of the original paintings is poor enough, but since they are the only scenes of flint-working hitherto recognized as such, they are very interesting.

Unfortunately the representations are extremely limited in scope. The processes of flint-working were numerous and varied: the blocks of material freshly extracted from the limestone matrix were first roughly trimmed; long flakes were then taken off the cores, adapted by chipping to the different uses for which they were required, and set in handles, fitted to shafts, &c. Larger instruments, however, such as knives and spear-heads, were usually reduced from a block, and not from flakes. The fine implements which are found associated with peculiar remains in certain cemeteries between Gebelên and Abydos, were ground to a smooth surface before being subjected to the delicate chipping which brought them to their exquisite finished state.¹ But it is doubtful whether this was the prevailing

process in the time of the XIIIth Dynasty.² However that may be, of all the processes of manufacture the only one illustrated in the paintings is the final shaping of flint knives, which, doubtless, were the most important articles made in that material, and even within this limitation the same attitudes are repeated. Thus, while we admit that these scenes may well have represented the subject sufficiently to contemporary Egyptians, to the archaeologist they are tantalizingly vague.

The illustrations on Pls. ix., x., are chiefly from the south wall of Tomb 2. On the monuments, flint knives are commonly figured in the hands of butchers, and probably we have in the tomb of Amený as fine examples of this subject as can be obtained anywhere. The details given on Pl. ix., x., were copied by Mr. Blackden in 1891, and the rest by Mr. Carter and Mr. Brown in 1895; they illustrate the process of sharpening the instruments as well as the actual employment of them in slaughtering cattle and in cutting up the carcasses.

¹ SPURRELL, *Archaeological Journal*, 1896, p. 46; see also PETRIE, *Negateh* (forthcoming).

² For specimens of flint knives from the end of the XIIth Dynasty, see PETRIE, *Kahun*, Pl. xvi., *Illahun*, Pls. vii., xiii., and the chapter by Mr. Spurrell, printed in the latter memoir, p. 51 *et seqq.*

PLATE VII.

CHIPPING FLINT KNIVES.

P. E. N.¹

MANUFACTURE OF FLINT KNIVES. TOMB 15.

From north wall of main chamber in Tomb 15; *B. II.*, II., Pl. iv.

The accompanying illustration shows the complete scene with the inscription $\left| \begin{smallmatrix} \odot & \left| \right. & \times & \left| \right. & \circ \\ \circ & \left| \right. & \circ & \left| \right. & \circ \end{smallmatrix} \right|$ *sekt sefu*, lit. "striking knives" or "flints," which at once removes any doubt that might exist as to the meaning of the representations.

It seems to have been the custom for the knife makers to work sitting on the ground, and frequently in groups of two. Besides the knives they have only two instruments of their trade, an anvil and a fabricator. In group *a, b*, the figure of the anvil is no longer visible, although it probably once existed. *a* seems to rest the lower end of his fabricator on this anvil, while he strikes or presses the edge of a

knife on its upper end. *b* and *d* have nearly the same action, easily understood: the workman holds the knife in his left hand, and with his right presses the fabricator downwards against the edge of the blade. *a* is apparently pressing the knife upon the fabricator, but in this case also the knife is held in the left hand, and in all probability the fabricator is being used horizontally against the knife. The result of *a, b*, and *d*'s work would be the removal of a flake of a certain kind, according to the direction and amount of pressure. *c* rests the fabricator upon the anvil while he holds up the knife to see whether its two faces are symmetrical, or evenly worked. The anvil is here coloured white.

¹ This and the following illustrations are reproduced from Mr. Newberry's excellent tracings, already published in the previous memoirs.

PLATE VIII.

CHIPPING FLINT KNIVES.



MANUFACTURE OF FLINT KNIVES. TOMB 2.

P. E. N.

From west wall of main chamber in Tomb 2;
B. II., I., Pl. xi.

The accompanying illustration gives the entire scene. The chipping is all done in a downward direction. Two of the workmen are holding up the knives to test the accuracy of their work. The draughtsmanship is very poor, but some interesting details are shown in the colouring. The anvils here are all black. It is clear that the fabricators were tipped with some material different from that of their shafts, for the shafts are coloured black and the tips red. Possibly they consisted

of flint flakes set in wooden handles. Lying about are many finished knives. All, except those in the little heap behind the standing figure, are provided with handles, formed by binding round the butt end of the knife with cord (?) worked into a little knob at the end;¹ an example is shown in colour in the plate, Fig. 2*a*.

¹ A knife, the handle of which was bound with cord, was found at Kahun, Петрух, *Illahun*, Pl. xiii., 6. Presumably the implements from Kahun were of inferior workmanship to those used in the ceremonies figured at Beni Hasan.

PLATE IX.

SHARPENING AND USE OF KNIVES.



COOKS PREPARING MEAT. TOMB 2.

B. H., I., Pl. xii.

Figs. 1 and 2. Knives in the hands of cooks dressing meat. From west wall of main chamber in Tomb 2; *B. H., I., Pl. xii.* See the accompanying illustration.

Drawing and colouring on this wall are alike bad, but Figs. 1 and 2 suggest that in these instances the blades were set in wooden handles.

Figs. 3-7. Sharpening and use of knives. From south wall of main chamber in Tomb 2; Figs. 3, 4, and 5, *B. H., I., Pl. xvii.*, seventh, eighth, and thirteenth figures from the left; Figs. 6, 7, *Pl. xviii.*, second and sixth figures from the left.

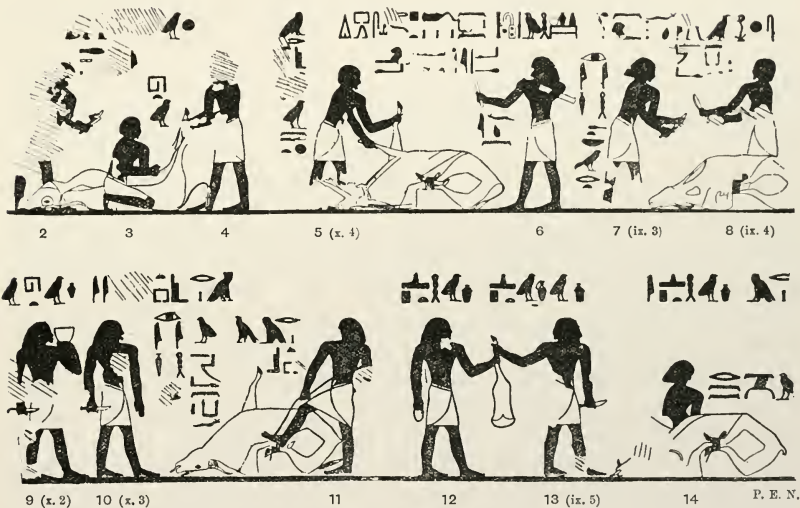
In 3 and 6 a sharpener is being used; it has

the form of a long rod, which is coloured black in 3, and green in 6. Possibly the sharpener was made of greenish or black basalt; but the green colour reminds one of jade. In the time of the Old Kingdom these sharpeners were represented as pierced at the end and furnished with a loop for suspension, as in the hieroglyph , read *seshem* (phonetic). Such are commonly found in the paintings of that period, but there are no loops on those depicted at Beni Hasan. It is curious that no such sharpeners or fabricators have yet been recognised in any country, and it is difficult fully to realise their form and use from these paintings alone. The knives were of course sharpened by re-chipping the blunted edges.

The operation was called  *pedt des*, but the literal meaning of these words is not very clear.

The man of Fig. 7 is also sharpening his knife. His loin cloth is complicated by some

peculiar additions: there is apparently a pouch at one side, and a band passing between the legs; in the belt he carries a spare sharpener. His knife and sharpener are shown in Pl. x., Fig 1.

CUTTING UP OXEN. Tomb 2.¹

B. II., I., Pl. xvii.

¹ This scene forms one row in the original, but is here divided for convenience. It represents the slaughter of oxen for the table of Amenemhat himself. That on the next page relates to the provision for his wife Hetepi. The subjects in Pls. ix. and x. are extracted from each indifferently.

PLATE X.

SHARPENING AND USE OF KNIVES.

Figs. 1-5. From west wall of main chamber in Tomb 2; Figs 1 and 5 (the last unfortunately turned at right angles), Pl. xviii., sixth and seventh figures from the left; Figs. 2, 3 and 4, Pl. xvii., ninth, tenth and fifth figures from the left.

The strength and dexterity of the cooks who cut up the carcasses of oxen with these knives must have been very considerable: in Fig 5 gore is seen flowing from the gash in the neck of the beast. The knives are of various colours: Fig. 4 shows a very fine kind of veined chert. The form of the handle also varies slightly with each example. Fig. 4 represents a knife of unusual size and perfection, which has a straight and slender handle bound with rush or similar lashing. More usually the ends are enlarged into a knob behind the grip by means of the lashing. The two black knives, Pl. ix., Fig. 4, and Pl. x.,

Fig. 2, have thin curved handles, different from any of the others. It may have occurred to those who have studied these paintings that the material of these last was blackish chert, translucent near the edge by reason of its thinness there; but the peculiar form of the handles suggests some more essential difference in material. The hieroglyph Fig. 70, Pl. v., is of the same colour and form, and only differs from them in that the handle is not bound round. In the hieroglyph, blade and handle are apparently of one piece; but such a form of implement would be very unserviceable in stone; for even if the difficulties of fashioning it were successfully overcome, it would break directly when put to use. But it may be that in this type of knife the blade was composite, and consisted of a sharp flake set with gum into a backing and handle of dark wood.



P. E. N.

CUTTING UP OXEN. Tomb 2.

B. II., I., Pl. xviii.

INDEX TO THE HIEROGLYPHIC SIGNS DESCRIBED IN THIS VOLUME.

N.B.—Many of these signs are of quite exceptional occurrence. These have been marked with an asterisk. In other cases, where types for printing exist, but differ considerably from those facsimiled in our plates, the former are given here for comparison.

- | | |
|---|--|
| <p> Fig. 74 watchman.</p> <p>*  Fig. 45 <i>picture-determinative</i>, bearer of offering.</p> <p>*  Fig. 80 <i>punning hieroglyph</i>, man with bow-drill.</p> <p>*  Fig. 82 priest and ape.</p> <p> Fig. 79 seated woman.</p> <p>*  Fig. 91 woman with shell (?).</p> <p>*  Fig. 96 woman of the marshes.</p> <p style="text-align: center;">—————</p> <p> Fig. 57 mouth.</p> <p> Fig. 60 side view of mouth.</p> <p> Fig. 43 <i>monogram</i>, arms and club.</p> <p> Fig. 54 arms holding corn-rubber
(= , ).</p> <p> Fig. 59 arm.</p> <p> Fig. 50 arm with spatula (?) (= ).</p> | <p> Fig. 53 hand.</p> <p> Fig. 95 vase on legs.</p> <p style="text-align: center;">—————</p> <p>*  Fig. 82 priest and ape.</p> <p>*  Fig. 75 divine lioness.</p> <p> Fig. 30 hippopotamus.</p> <p> Fig. 31 new-born calf (= ).</p> <p> Fig. 35 ram.</p> <p>*  Pl. I. oryx.</p> <p> ¹ Fig. 55 shoulder and foreleg.</p> <p> Fig. 46 hide.</p> <p style="text-align: center;">—————</p> <p> Fig. 13 Egyptian vulture.</p> <p> Fig. 5 hawk in plan of enclosure.</p> |
|---|--|

¹ The printed type appears to represent a hind-leg, perhaps incorrectly.



Fig. 7 owl.



Figs. 9, 14 swallow.



Fig. 15 chick.



* Fig. 2 plover.



Figs. 3, 10 plover.



Fig. 4 crested ibis (=).



Figs. 1, 8 flying duck.



* Fig. 11 fat duck.



Figs. 6, 12 goose; compare Fig. 96.

* Fig. 29 *picture-determinative*, trussed goose (cf.).

Fig. 72 ostrich feather; compare Figs. 25, 26, 67.



Fig. 24 lizard.



Figs. 102, 103 part of fish (=).



Fig. 69 slug.



Fig. 33 bivalve shell; compare Fig. 91 (?) (=).



Fig. 16 papyrus clump; compare Fig. 96 (?).



Fig. 19 plant (=).



Fig. 20 plant of South, sedge (?).



Fig. 17 radish (?) (doubled).



Fig. 28 grape-vine on poles (=).



* Fig. 83 flower (?).

* []¹ Pl. I. (p. 4) bundle of fodder.]* Figs. 92, 93 *picture-determinative*, corn in vase.

Compare Fig. 80 and p. 26.



Pl. I. sloping ground, boundary of valley.



Pl. I. subdivided land.



Fig. 76 plan of city (?).



Fig. 94 flat land (dual form).



Fig. 88 water-basin.



Fig. 85 fire.



Fig. 76 plan of city.



Fig. 56 plan of chamber.



Fig. 5 enclosure with hawk.



Fig. 62 plan of battlemented building (=).



Fig. 41 wooden clamp (?) unit line (= 1).



Fig. 49 bolt.



Fig. 23 boat with net (=).



Fig. 47 paddle.



Fig. 21 stand with food.



Fig. 66 chest.

¹ Not a hieroglyph, but of the same origin as .

-  Fig. 86 throne.
-  Fig. 87 screen.
-
-  Fig. 34 bowl or basket ; compare Figs. 92, 93, 62.
- *  Fig. 38 *picture-determinative*, beer-jar.
-  pot ; compare Figs. 95, 18 and 28.
-  Figs. 97, 98 *picture - determinative*, unguent vase.
- *  Fig. 99 *picture-determinative*, unguent vase ; compare Fig. 21.
-  Fig. 35a *hieroglyph* (= ), Figs. 100, 101 *picture-determinative*, unguent vase.
- *  Fig. 48 ewer on stand (= ).
-  Fig. 27 *picture-determinative*, leather bag (= ).
-  circular cake ; compare Figs. 21, 26 (?), 45.
-  loaf of bread ; compare Fig. 21.
-
-  Fig. 71 bone harpoon-head (= ).
-  Fig. 32 arrow (= ).
-  Fig. 77 angulated club (= ).
-  Fig. 44 black club ; compare Fig. 43.
-
-  Figs. 63, 65 knife in wooden handle (= ).
- *  Fig. 70 knife ; cf. p. 38.
-  Fig. 73 adze chopping.

- *  Fig. 80 man working bow-drill.
-  Figs. 64, 68 fire-stick (= , ).
-  Fig. 89 drill-cap (?) ; compare Fig. 25 (?).
- *  polisher or corn-rubber ;¹ compare Fig. 54.
-  Fig. 50 arm with spatula (= ).
- *  Fig. 39 *picture-determinative*, instrument for "opening the mouth."
-  Fig. 42 key or slave-fork (?).
-  Fig. 37 cubit-rod.
-
-  Fig. 18 scribe's outfit.
-  Fig. 61 papyrus roll scaled (= ).
-
-  Fig. 52 coil of rope (= ).
-  Fig. 51 hank or stick of cord (= ).
-  Fig. 78 loop of cord ; compare Fig. 74.
- (*net*) Compare Fig. 23.
-  Fig. 22 looped cord.
-  Fig. 58 (?) (= , ).
-  Fig. 27 leather bag (= ).
- *  Fig. 40 linen bandage.
-  Fig. 75 linen bandage.
- (*wrapping*) Compare Fig. 81.

¹ Not a hieroglyph.

*  Fig. 90 band or armlet (?).

*  Fig. 83 flower or ornament (?).

*  Fig. 84 collar with fork.

 Fig. 36 necklace and pendant (= ).

 Fig. 75 figure of divine lioness.

 Pl. I. oryx on stand as nome-sign.

 Fig. 81 sacred emblem.

 Fig. 25 emblem of West.

 Fig. 26 emblem of East (= ).

 Fig. 67 sceptre of Thebes.

 Fig. 104 (?).

 Fig. 41 unit line.

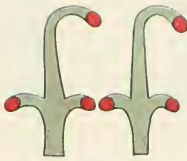
*  Fig. 84 (?) on gold collar.

 Fig. 58 (?) (= , .





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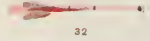
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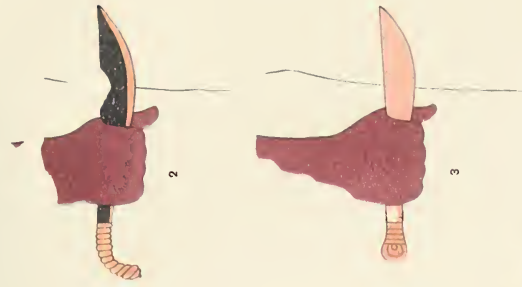


CHIPPING FLINT KNIVES.



CHIPPING FLINT KNIVES.





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